MAYFORDS
Chartered Surveyors

BUILDING SURVEY REPORT

OF

6 Lawrence Drive, Ickenham, UB10 8RN

AS INSPECTED BY MAYFORDS (SURVEYORS) LIMITED

On: 31st October 2019

For: Tom William Linscott Kate Lara Linscott

Of: 63 Cranston Close, Ickenham, UB10 8TH

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Tom William Linscott Kate Lara Linscott
63 Cranston Close
Ickenham
UB10 8TH

1st November 2019

Our Ref: 7265/PM/PR

Dear Tom William Linscott Kate Lara Linscott,

Re: 6 Lawrence Drive, Ickenham, UB10 8RN

1.0 INTRODUCTION

This report is for the private and confidential use of the client(s) Tom William Linscott Kate Lara Linscott for whom the report is undertaken. It should not be reproduced in whole or in part, or relied upon by third parties for any use, without the express written authority of Mayfords (Surveyors) Limited.

In accordance with your instructions, we inspected the above property on 31st October 2019 to advise you as to the structural condition and state of repair. Our report which follows is divided into sections, in the interest of clarity, followed by a brief summary of our advice. We have added a glossary describing a number of building terms and defects to be read in conjunction with the report.

We have not investigated any legal matters such as Planning, Building Control or Highways. Your legal advisors will need to advise further on these matters.

We have not carried out any investigation to determine if high alumina cement concrete, calcium chloride additive, asbestos or other deleterious material has been used in the construction of this property, and we are unable to report that the property is free from risk. Similarly, we have not carried out any investigations or enquiries regarding possible contamination of the site, and for the purpose of this report we have assumed that it is free from all contaminants. If it is subsequently established that the site is contaminated, the marketability and value of the property could be reduced.

The perceived nature of the sub-soil, where possible, is described below, but can only be confirmed by digging trial holes. The possibility that the property is built on made-up ground has not been investigated nor has the likelihood that the site may be affected by ground water of any kind. Enquiries of this nature form part of an environmental search and we would recommend that you commission such a report.

SCOPE OF SURVEY

The inspection, at which the Vendor / developer attended for a short period. At the time of inspection the property was unoccupied / unfurnished having recently been extended and refurbished internally and externally. We were only able to gain a limited view of the roof coverings to the main roof because of the height configuration of the roof.

We were only able to inspect those parts of the structure which were accessible without removing furniture and fittings. Our inspection to the roof timbers was restricted by felt fixed to the underside of the rafters and insulation and layers of dust and part boarding restricting the scope of our inspection within the roof space. We inspected those parts of the property which could be seen from either ground level externally, or from within the property. We did not disturb any parts of the structure which were concealed during the course of construction for example foundations were not exposed; floorboards were not lifted and plaster was not removed from the wall surfaces. It follows that for practical reasons we have not inspected all the brickwork, timber, or other parts of the structure which are covered, unexposed or inaccessible and are unable to report that any such part of the property is free from defect. Whilst we saw no evidence of woodworm infestation, we would point out that the absence of characteristic flight holes is no guarantee that larvae are not already tunnelling within timbers. No timber can be confidently stated to be free from infestation unless it is properly chemically treated.

This report is confined to material defects only and we have not noted any minor items such as cracked panes of glass or loose door and window fittings, which are not urgent or of structural significance. However, such other matters may be reported where the surveyor judges this may be helpful and constructive.

2.0 SITUATION AND DESCRIPTION

The property is situated within a residential area with local shopping and transport facilities to be found nearby.

The property benefits from gardens to the front and rear with provision for off-road parking to the front of the house.

There is no garage provided to the property, there is a slight slope to the ground falling towards the front and from left to right. There is a garden building with WC in the rear garden.

The subject property is a two storey semi detached house standing to the right hand side of its partner with single storey front bay window projection. The property has been extended at ground floor level to provide a rear and side wrap around extension with a further front entrance porch extension.

3.0 ACCOMMODATION

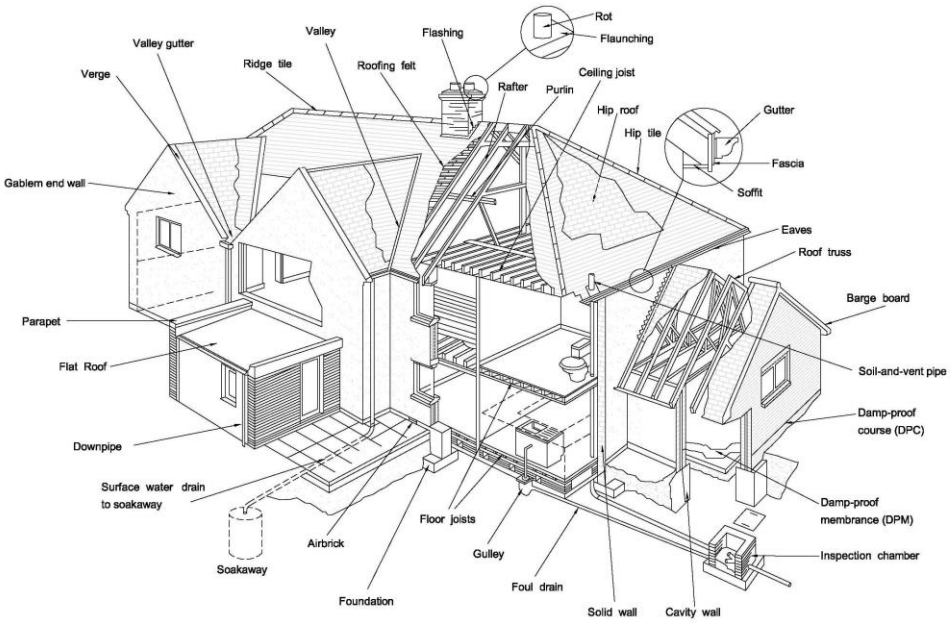
The accommodation comprises as follows:

Entrance, porch into hallway, open plan reception room, family room and kitchen leading through to utility room, ground floor WC, bedroom four with en suite shower (front right), staircase to first floor, bedroom one (front left), bedroom two (rear left), bedroom three (front right), family bathroom (rear right). Garden building with WC.

Directions ‘left’ and ‘right’ used throughout this report are always taken as if viewing the property from the public high road at the front.

4.0 EXTERNAL CONDITION

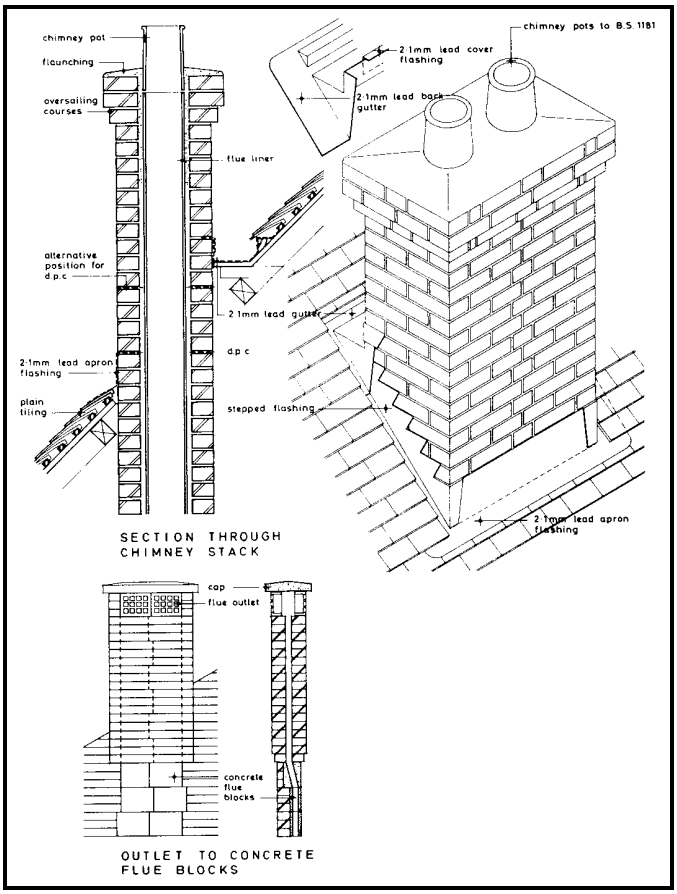
Although the majority of the exterior was examined from ground level, random inspections were undertaken from a 3 metre (10 foot) ladder.



CHIMNEYS

There is one brick built chimney stack serving the subject property located to the left hand side aligning with the position of the party wall, this appears to be shared with the neighbouring property.

The sketch below illustrates the technology used when referring to chimney stack design. It may be seen from the sketch that a damp proof course is now incorporated within chimneys in order to prevent the downward penetration of rainwater.



We saw no visible signs of significant cracking or leaning where possible to view.

A chimney stack built during this era would not necessarily have incorporated a damp proof course and it is therefore essential to maintain the condition of the brickwork in order to prevent such dampness occurring. In this regard, some local deterioration and weathering is noted to the surface brickwork and pointing and this requires repair. When any pointing is carried out it is essential that the joints are raked out sufficiently, usually to a depth not less than 12mm so that the new pointing is given sufficient key. Failure to do this can result in the new pointing simply cracking and falling out over a relatively short timescale. The pointing itself should not be stronger than the bricks to which it is applied. Too high a cement content can allow shrinkage cracking.

Spalling occurs when brickwork becomes wet due to rain and if freezing conditions occur before the bricks dry out, the entrapped moisture expands and forces off the hard face of the brick, thus exposing the softer inner face.

In order to slow down future deterioration of the brickwork, it is recommended that the brick surfaces be treated with a microporous transparent water-proofing solution. These solutions have the ability to prevent rain penetration while at the same time allowing trapped moisture to dry out. They are not long lasting and will require re-treatment in conjunction with future external redecoration programmes.

Lead flashings are featured at the base of the chimney stack where this adjoins the sloping roof surface, where visible this appears to be in a serviceable condition.

All chimney pots above redundant flues should be removed and the latter capped off and ventilated in order to minimise the risk of condensation from occurring within the flues. Ventilation is essential to capped off flues as weather penetration downwards, coupled with the effects of condensation within, will often result in deterioration to the materials within the structure and brown damp stains could occur on chimney breasts inside.

ROOF

The main roof to the property is of timber pitched construction of three slopes covered with a small unit concrete tile with monopitched roof featured above the front porch and bay window projection with flat roofs featured above the side and rear extensions.

The average life of such tiles ranges from between forty to sixty years and it therefore follows that the existing roof coverings are now reaching a point where regular maintenance will be necessary.

We noted some evidence of lichenous deposits to the surface of the roof tiles and, ideally, these should be brushed off as these can cause deterioration of roof coverings and if they become dislodged in gutters they can cause blockages and damp penetration problems to the structure beneath.

The general condition of the roof tiles were found to be in serviceable condition, despite the effects of weathering. It is important to maintain the condition of these tiles, not only to secure them but to render these parts of the roof weather-tight.

We note the hip tiles to the front bay have come loose and will need to be repointed and rebedded.

In summary the roof is approaching an age where regular maintenance will be necessary together with the eventual replacement. Overhauling of the roof can be undertaken in the short term and this will include replacing any cracked, soft or

slipped tiles and a general check made around the detailing of the chimney stacks and ridges to ensure the structure remains generally weather-tight.

We found no obvious signs of any significant distortion or deflection to the pitched roofs to suggest any structural failures within the roof frame. We would stress to you, however, that the condition of the roof coverings are likely to continue to deteriorate in the longer term and the question of their condition may well arise again upon the future re-sale of the house.

In relation to the flat roofs to the extension it should be noted that compared with traditional coverings depending upon exposure, quality of felt and workmanship, flat roofs have a typical life span of 10 to 15 years. They are also prone to sudden failure and leakage. Continual maintenance and periodic re-covering will therefore be necessary. When the roofs are recovered they should be insulated and ventilated in accordance with current Building Regulations.

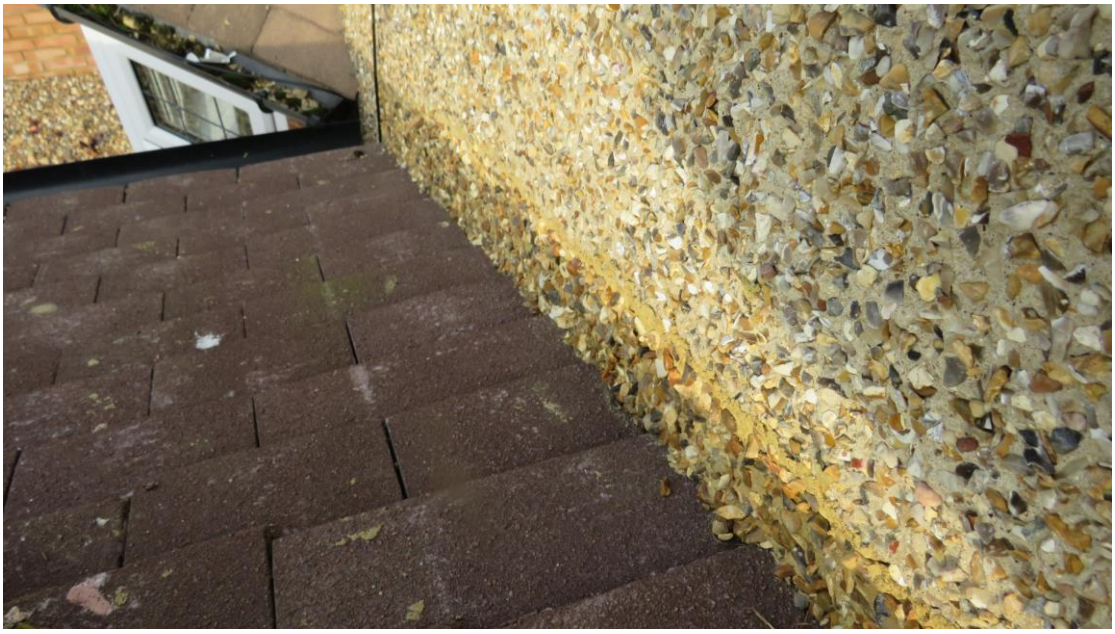
A mineralised bituminous felt finish is provided to the flat roof. There are no roof chippings or reflective solar paint provided, although mineralised felt finishes will generally have an inherent resistance to solar radiation and no further treatment is usually required for this reason. However, roof chippings are also provided to improve the overall fire resistance of the roof finishes and would prevent hot embers from a fire in an adjoining property burning through the felt. Having said this, there are a number of different products on the market and some high performance felts do have inherent fire resistant properties, requiring no further treatment to be applied. We are unable to confirm from a visual inspection the specification of the product provided.

A mineralised upstand is provided at the abutment with the wall of the house. The felt will be prone to excessive thermal stresses at this point and although the manufacturers of some of the high performance felts suggest that their products can be used in this application, the provision of a properly formed lead cover flashing is recommended.

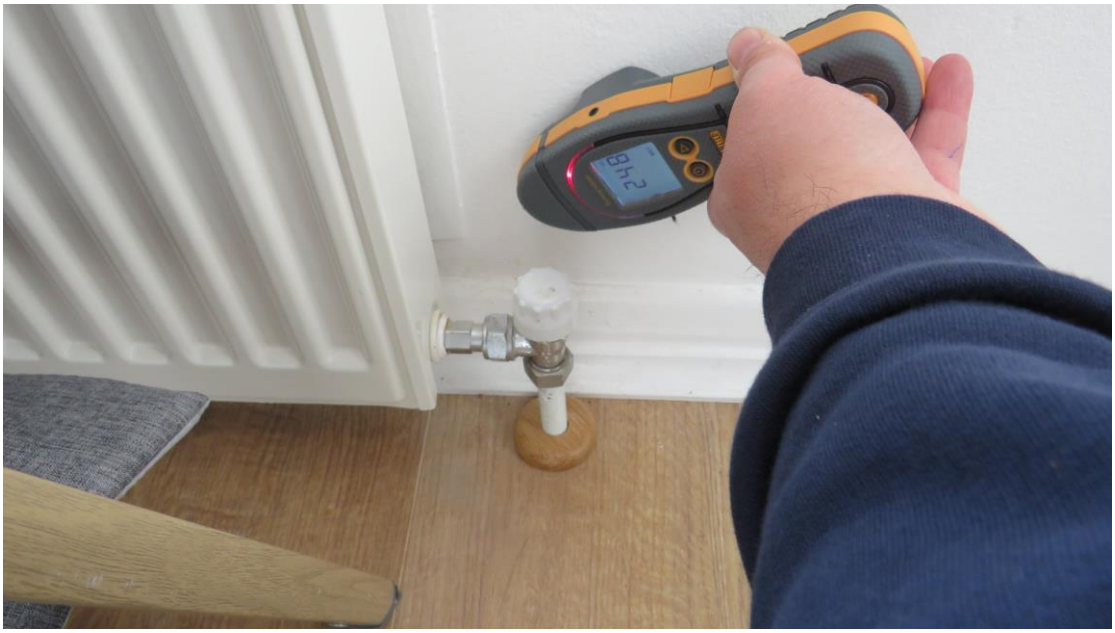
Flat roofs should be insulated. Experience indicates that flat roofs tend to suffer greater heat loss in winter and heat gains in summer. This may be reduced by the provision of ceiling insulation and should be laid over the vapour barrier or vapour check, but in the case of cold deck designs, with an adequate ventilation gap to permit free circulation of air directly under the decking.

It would be wise to keep an eye on the ceilings below the flat roof areas and take prompt action as and when any stains arise, given their inherent unreliability.

We note in your initial enquiry you have questions as to why lead flashings have not been installed to the front single storey projections, the developer / builder advised that they have been installed, however these have been cloaked behind the pebbledashing. There is evidence of new pebbledashing around the junction where the porch meets the main house, where the cement work has a darker consistency and appears to be newer with similar new pebbledash at the junction where the sloping roof to the front right hand side extension. Whilst this is not an uncommon details the problem with dressing over metal or lead flashings, differential expansion and contraction can occur resulting in cracking and the render falling away. There is evidence of local hairline cracks starting to appear above the porch roof.



Internally within bedroom three adjacent to this area there is high moisture meter readings / evidence of dampness and we note that the gutter above appears to be leaking and appears to have deflected at this position. These areas require urgent further investigation and repair. Ideally the cement render / pebbledashing should be stopped higher than the lead flashing, otherwise this will be prone to cracking.



Furthermore metal / lead flashings would be preferred as these are more tolerant to differential movement which are common at such parts of the structure, where an addition / extension meets the main building.

GUTTERS, DOWNPIPES AND GULLIES

The rainwater pipes and gutters are formed in modern plastic, incorporating half round sections to the gutters. Generally, these were found to be in reasonable condition. However, as it was not raining at the time of the inspection we cannot state whether the fittings are totally watertight.

The gutters and gullies should be cleared on a regular basis of leaves and other debris. Blocked gutters and gullies can result in serious rainwater penetration problems and consequential rot to the adjacent timbers.

The downpipe to the first floor front right hand side corner and rear left hand corner at ground floor level requires some adjustment. There are minimal wall fixings to the right hand side downpipe and the downpipe to the rear left hand sided needs to be repositioned to avoid conflicting with the external light.

We confirm that in undertaking our inspection of the property that none of these gullies were placed on test.

DRAINAGE

Within the curtilage of the property, 2 inspection chambers provide access to the underground drainage system, sited to the front. We raised the covers above these manholes and noted these appeared free from obvious blockages with no visible signs of defects evident to the pipework where visible. Although the channels in the accessible inspection chambers appeared clear and serviceable, and there was no obvious back-up of foul effluent, the precise condition of the drains can only be verified by testing.

Your legal advisor should ascertain as to whether the below ground drainage is classified as a separate or combined system and whether these are in joint ownership and what, if any, joint financial responsibility is afforded for the upkeep and maintenance of the same.

It is unreasonable to expect that a drainage installation of this age is free from cracked joints and pipes. You should therefore anticipate that some maintenance will be necessary in the near future. The standard and adequacy of the drainage system can only be ascertained as a result of a test by an appropriate specialist.

It was not possible to decide whether a separate surface water system or soakaway arrangement is provided for the disposal of rainwater below ground.

The plot drains towards the front of the building and as a consequence there is the risk of a heavy run-off of rainwater in storm conditions which could give rise to flooding. Although there is no obvious sign of flooding at the property to date, it is

important to ensure that all gullies are kept clear of blockages. It is questionable whether the gullies at the property could cope with storm conditions. You may wish to enquire whether there is a history of flooding at the house.

MAIN WALLS

The main walls to the property appear to be of cavity brick construction with pebbledashed surfaces to the first floor front and full height to the right hand side and rear elevation.

It is important that you appreciate that the overall stiffness of cavity wall construction relies upon the inner and outer skins of the walls being held together by effective wall ties. Properties built before 1981 are likely to consist of galvanised steel wall ties with an effective life of between 20 and 50 years, providing that they have been adequately manufactured to resist rapid corrosion. Without the benefit of exposing the walls we cannot confirm the existence, or indeed the condition, of these wall ties.

When corrosion takes place it can cause horizontal cracks every four, five or six courses of brickwork in the mortar joint and sometimes this is accompanied by bulging in the outer leaf of the brick wall. We have found no indication of failures to suggest that there is an existing defect in the wall ties.

We have not seen the foundations, but bearing in mind the age of the property it is likely that these would not be to a sufficient depth to satisfy present day standards. Requirements in more recent years have become more stringent, partly the consequence of the drought in 1976 which resulted in failure to many buildings from excessive clay soil shrinkage.

In a property of this age it is probable that the foundations of the bay are shallow by modern standards, and by the standards of the main structure. In shrinkable soils, such as are found in this area, the risk of structural movement is greater when the foundations are shallow. The risk increases as soils shrink in hot, dry summers. Roots from trees and shrubs can also have a significant contributory affect.

Should extensions be added to the existing cavity brick wall it is important to ensure that cavity trays are fitted within the cavity of the original part of the building above the line of the roof extension. This is to ensure that any rainwater running down the cavity discharges before it passes into the internal areas of the building. It is good practice to include weep holes (vertical slots in the perpendicular joints of the brickwork) immediately above the line of the cavity to allow rainwater to escape and this is evident around window/door fenestrations.

We note some slight hairline cracking to the pebbledashed render which has recently been applied above the porch, see comments under roof section of the report, this will require local repair and possible upgrading to incorporate a perimeter lead or metal flashing around the junction to maintain the buildings long term weatherproofing qualities.

We note some slight deterioration evident to the pointing to the front elevation around the bay window.

When any pointing is carried out it is essential that the joints are raked out sufficiently, usually to a depth not less than 12mm so that the new pointing is given sufficient key. Failure to do this can result in the new pointing simply cracking and falling out over a relatively short timescale. The pointing itself should not be stronger than the bricks to which it is applied. Too high a cement content can allow shrinkage cracking.

The rendering may be concealing defects to the main walls, although internally there were no obvious signs of serious problems.

Cement rendering is prone to fracturing over the years due to normal shrinkage, frost action and ageing processes and some cracking is evident. Any areas of hollow rendering should be hacked off and renewed.

We confirm that we have not undertaken any form of excavation to determine the sub soil type nor indeed to expose the foundations. The leeching effects of tree roots can hasten and exacerbate the drying out of shrinkable sub soils during periods of hot, dry weather, thus resulting in shrinkage at foundation depths and below, causing damage to foundations. Risk of movement can also be reduced by maintaining the drainage in good condition and controlling the growth of vegetation, including trees and hedges.

Clay sub soils normally provide a reasonable base for foundations, but suffer the disadvantage of excessive shrinkage during hot dry summers which brings about an irregular reduction in their volume and ability to support structures. In extreme circumstances this will lead to subsidence. Planting a tree close to an existing building entails some risk of damage when the tree reaches full size and in the event of long dry periods. The risk will decrease with periodic pruning of the tree to ensure that it does not reach full height.

The complete removal of trees is not recommended as this could cause the sub-soil to swell and lead to foundation heave; this might produce worse damage than would be encountered through subsidence.

The structural condition of the property is otherwise satisfactory. We found no evidence of any significant cracking or current settlement/subsidence or structural

movement and no indication to suggest that the foundations are defective or inadequate.

We understand you may be considering an extension above the single storey side extension. You will need to check with building control and obtain the approved drawings in relation to the foundation depth. In principle extending above this level may be possible, however again this will be subject to planning approval and conditions and sometimes it is nessercary to build the extension steps back 1 or 2 meters from the boundary which may make an extension unfeasible. However this will need to be checked further with your architect.

JOINERY

Timber fasicas and soffits are featured to the main property with a UPVC fascia, soffits featured to the front, side and rear extensions. UPVC windows and doors are also featured to the property.

In relation to the timberwork we note evidence of deterioration with local rot and damage evident to the fascias and soffits, these will need repair.

We stress to you that having regard to the age of the property that some rotting to the upper sections of the supporting gutter boards is now inevitable. The gutters themselves may be hiding areas of decay.

The UPVC windows and doors are found to be in a serviceable condition, we did note that the bi fold doors to the kitchen are not operating correctly as they are catching in the rubber gaskets and requires overhauling and adjustment to minimise further damage and to ensure they are operational.

The keys to all windows and doors should be made available on completion of the sale. Any guarantees for the double-glazing should be checked and retained for future reference. The double-glazed units should help reduce the amount of repainting required over the years. The vacuum seals to the double-glazing are prone to failure, and are particularly unreliable in older double-glazed units. If the

vacuum seals fail the affected glazing will need to be replaced, which could prove problematic unless there is an easy means of removing the affected glazing. Following amendments to the Building Regulations all window installations after April 2002 are subject to approval under the Regulations and therefore it is important to ensure that any recent window replacement has the necessary approval or has been undertaken by an authorised installer (FENSA).

In relation to the previously painted timberwork at eaves level to the house we would note that prior to any repainting, any sections of decayed joinery should be cut out and replaced. It is possible that areas of rotted joinery have been painted over and therefore concealed.

It is important to ensure that the sealants around the frames are maintained in a satisfactory condition. In time these are likely to harden and crack and provide ingress points for rainwater.

The junctions of the roof with the roof lights are areas where, in time, leakages may occur as the flashings are prone to failure. Although there is no obvious sign of any leakages at present, it would be wise to monitor the condition of these areas and take action if any water stains arise at adjacent areas below.

PLINTH and DAMP PROOF COURSE (DPC)

There is a small plinth to the bay to the front of the property, otherwise the render has been carried down to low level to the right hand side and rear, where visible this appears to be in a serviceable condition.

Please note that the recommended minimum height of the damp proof course is 150mm above external ground level. The reason for this gap is to prevent soil, etc. build-up and thus bridging the line of the damp proof course. If this occurs, it provides a path for rising dampness to by-pass the lining of the damp proof course and gain entry to the property.

We note that ground levels are high relative to the porch and ideally ground levels should not be increased any higher at this point. A suitable height from the damp proof course is 150mm / 2 brick courses, this is required to minimise rising dampness and damp related problems which can arise from bridging of the DPC.

The porch door opens outwards, which is not ideal particularly during wet weather conditions. Ideally the door should be rehung to open inwards and you should obtain quotations for this alteration, which may involve the replacement of the door.

SUB FLOOR VENTILATION

As the property has a solid concrete floor there are no airbricks / requirements for sub floor ventilation.

GATES, FENCES and PATHS

There is a new brick wall to the front and left hand corner of the front garden area with a more dated brick wall to the right hand side which has suffered some weathering and damage, and local cracking and will need repair. New fences have been installed in the rear garden, where visible these appear to be in good condition.

Shingle has been laid to the front with paving slabs laid to the rear, the paving slabs all appear to have been newly laid, presumably as part of the extension, these all appear to be in good condition.

Your legal advisor should ascertain ownership of the boundaries, particularly in view of maintenance which is required, but also to ensure that no boundary disputes exist.

We would point out that driveways and pathways are generally constructed on minimal foundations and are susceptible to movement, particularly in shrinkable clay sub-soils and, therefore, periodic inspections and patch repairs will be required.

The gardens are in a seasonal condition, and there are some cracked, weathered and uneven paved areas.

OUTBUILDINGS

There is an attached single storey in the rear garden constructed in traditional masonry with pebbledashed and rendered surfaces under a flat timber felt covered roof with internal walls, plastered boarded, plastered and painted.

The structure generally appears to be in a serviceable condition, there is no obvious signs of visible or significant cracking or damage evident to the structure where possible to inspect. We note that the hot water was turned off on the date of inspection and it would need to be checked and confirmed that this is in working order.

Further the main door was binding in the frame / on the hinges and this will need some adjustment.

PAINTWORK

The reapplication of paintwork will be required to the external joinery sections to preserve the existing wood and also as and when any repairs are completed.

Before reapplication of paintwork is undertaken we would stress the thorough preparation of all surfaces concerned. Reapplication of paintwork will include two undercoats and a finishing coat of hard gloss paint.

5.0 INTERNAL CONDITION

The interior has been inspected from floor level only, unless otherwise stated. We have not attempted to remove any fixtures, wall hangings nor heavy furniture.

LOFT SPACE

Access is possible via an access hatch in the first floor landing sealing, access was gained using our own ladder and torch.

The main roof was found to comprise of pitched rafters supported by a horizontally positioned purlin at mid-height.

The roof frame is relatively flimsy in comparison with modern standards. Nevertheless, there is no evidence of any extensive structural movement justifying any urgent strengthening works.

The underside of the rafters / main roof was obscured from view as felt has been fixed to the underside of the rafters. This felt conceals the roof structure, we would note the absence of ventilation between the felt and underside of the roof can reduce

the life expectancy of the tiles, without examination of the tiles we are unable to confirm the condition or level of ventilation that has been provided.

A thin layer of fibreglass wool has been laid between the ceiling joists to effect thermal insulation. In order to comply with current day thermal regulations wool, the average thickness should be increased to an even 270mm to 300mm. Should loft improvement works be carried out, care should be taken not to block any of the eaves ventilation or cover electrical cabling with the insulation material.

The chimney breast internally have been removed from the ground and first floor and supported within the loft area, supporting back onto metal gallows brackets bolted into the party wall with a concrete beam between the brackets supporting the remaining chimney structure. Where visible this all appears to be in serviceable condition, your legal advisor will need to check and advise as to whether building regulation approval / party wall agreements were obtained in relation to the same.

There is signs of staining on the boarding, however this appears to be old, nevertheless with the presence of the felt we are unable to analyse the condition of the timber or roof structure and ideally this should be removed for further inspection and possible repair.

We understand from your initial enquiry that you may be considering a loft conversion, whilst it is beyond the scope of a building survey to comment on feasibility for a loft conversion, in principle this would appear to be viable. Reasonable head room is afforded, however clearly alterations and extensions to the roof will be required to enable access for a staircase to meet building regulation requirements. Your need to take further advise from an architect in relation to the feasibility and design of the same, prior to legal commitment.

CEILINGS

The ceilings are a mixture of plasterboard with lath and plaster ceilings.

The life of lath and plaster ceilings depends upon the quality of the original workmanship and the degree of exposure to dampness from roof and plumbing leaks and the amount of stress from flexing and so forth. Generally a life span of between 50 and 100 years is typical and it therefore follows that the existing ceilings will reach a point where problems may be experienced.

We would point out that this type of plasterwork over the years is susceptible to vibration, disturbance and shrinkage which can (and often does) result in loss of adhesion and sudden failure. Continual repair and re-plastering must therefore be anticipated.

Minor hairline cracking was noted at various locations, predominantly at junctions of walls and ceilings, but this was generally minor in nature and capable of being filled prior to the next phase of redecoration.

Textured ceiling surfaces are featured within bedroom three.

Asbestos as material presents little or no hazard to health if maintained in good condition. Asbestos materials have been used in property construction up until the mid 1970s, and even up to the late 1990s for some materials. However, it should be noted that the maintenance or removal of asbestos materials is likely to require the use of specialist contractors, and the costs of this are considerably higher than the treatment of other types of building materials. It should be noted that with legislative changes and increases in disposal costs the presence of asbestos might have an impact upon the future value of this property. As a general point, it is important to avoid disturbing the asbestos material as this could give rise to the release of hazardous particles.

In undertaking any alterations to the property, or repair works, should any asbestos material be discovered then the advice of the local Environmental Health Officer should be obtained concerning further action to be taken. We should point out that asbestos materials have been used in property construction until the mid 1970s (such as Artex), and even up to the late 1990s for some material. It should be noted that with legislative changes and increases in disposal costs, requiring the use of specialist contractors, if there is asbestos at the property this could have an impact on its value. The scope of the inspection makes it impossible for me to confirm whether the property is completely free of asbestos.

We note some slight hairline cracking to the ceiling within bedroom one to the right hand corner, this has been filled and repaired. We would point out that the internal walls and ceilings have been white washed and painted throughout and upon occupation when heating is turned on it is likely that shrinkage and differential hairline cracking may occur, and you should allow adequate budget for general minor repairs prior to the next phase of redecoration.

INTERNAL WALLS and PARTITIONS

The internal walls are a mixture of masonry and timber stud partition which has been plastered and decorated.

We stress to you that we are unable to gain access to all internal surfaces of walls and partitions, due to fitted furniture and machinery. Should there be conditions of

dampness either penetrating or rising through defects in the damp proof course then this could give rise to a condition of wet or dry rot in the adjoining timber work

We note some minor hairline cracking above and below the windows within bedroom three and bedroom two, we note that internal alterations within the ground floor kitchen / reception room area have been undertaken where the main wall has been removed.

We have not seen the nature of support over the openings formed when the internal alterations were carried out. At each opening a beam (usually of steel or reinforced concrete) is normally required with suitable end bearings. Although these could not be seen, there were no indications of movement or significant deflections to these areas.

It is possible that some slight settlement may have occurred at this position, there is no obvious signs of repetition of cracking externally, however these cracks will need to be repaired to minimise the potential for further crack damage / possible movements.

Slight movements are likely to occur to the timber-framed internal walls, which probably will give rise to various cracks arising over the years, and possibly the lifting of any tiling.

The internal partition walls are of timber studwork construction and prone to movement.

Using a hand held moisture meter, high readings were noted below the window to bedroom three and we refer to our comments previously in relation to the repairs and pebble dashing over the porch entrance area. Furthermore as noted under the gutter, downpipe and gully section of the report the gutter appears to be leaking and this requires urgent repair prior to making good all damage so caused.

FIREPLACES, FLUES and CHIMNEY BREASTS

There are none.

WINDOWS and DOORS

The present condition of the windows are found to be in a serviceable condition.

Your legal advisor should ascertain as to whether there are any guarantees or warranties provided for the window replacement works and if these were installed after April 2002 then FENSA certification/Building Regulation approval is required.

Internal doors were generally found to function satisfactorily, fitting within the frames provided.

The kitchen units have been replaced as part of the refurbishment, where visible these all appear to be in operational condition.

FLOORS

The ground floor appears to be of solid concrete construction with suspended timber floor construction to the first floor accommodation.

The floors were found to be reasonably firm and flat and capable of bearing normal domestic loads. It should be noted that floors are one of the hardest areas to pass comment on due to the presence of furniture and fitted carpets. The risk must therefore be accepted that defects may exist beneath the carpets/floor coverings that are hidden from view.

The floor structures were designed to the standards of the time, which are inferior to present day requirements in terms of joist size and spacing. Therefore a degree of springiness can be expected to some of the floor areas.

We note that the floor within the kitchen leading to the utility room is uneven and sloping from left to right, this may be due to poor setting out of the concrete floor / screed, this may require relevelling. Further we note that the wood laminate floor within the reception room is starting to bow and lift adjacent to the party wall to the left hand side approximately half way into the front reception room, it is possible that this may be the result of the floor coverings being too tightly fitted. a 5/10mm gap should be allowed around floor coverings to allow for thermal expansion and contraction. In the absence of any gaps of such kind this can result in the floor lifting and in turn can result in costly repairs in relaying the floor, which involves lifting skirtings and recutting the floor finishes.

Otherwise all surfaces are even and free from evidence of sub soil settling and where access to the concrete floor surfaces is possible, there is no indication of deterioration to suggest any unwanted problems of rising dampness beneath. Nevertheless, we stress to you that in the laying of a solid concrete floor of this type it is essential that a waterproof membrane has been incorporated to prevent conditions of dampness rising from the sub soil. Although in those areas accessible for inspection there is no indication of deterioration of this type, we stress that we can provide no assurance in this respect as to the floorings as a whole, without complete removal of all floor coverings.

We would refer to our comments under the internal wall section of the report in regards to dampness within bedroom three.

There is the risk of rot to timbers adjacent to any present or previous damp problems. By its very nature dry rot fungus usually grows in unexposed areas and although fungal attack was not evident in the areas that were readily accessible, we cannot state categorically that the property is completely free of such problems.

STAIRS

The timber frame staircase was found to be sound and manageable under foot.

6.0 SERVICES

These have been inspected visually only, where accessible, and no tests have been applied. Standards and adequacy of installations can only be ascertained as a result of a test by an appropriate specialist. A general comment only is included under the following sections:

ELECTRICITY

The consumer unit and meter is located in the cupboard under the stairs, where were large volumes of stored items within the cupboard on the date of inspection restricting the scope of our inspection.

It is impossible to guarantee the condition of an electrical installation on the basis of a visual inspection only. There are many aspects relating to the physics of electricity which can only be identified by the application of test instruments which cover matters relating to resistance, impedance and current etc. Only proper testing of the installation will provide a true picture.

We would recommend that the system be inspected and tested by a qualified electrician and a report obtained. Pending receipt of an electrician's report we suggest you allow for the possibility that some expenditure on the electrical installation will be necessary.

You should arrange for a qualified electrician to test the installation and quote for any necessary remedial work prior to legal commitment to purchase. The electrician should be registered with the National Inspection Council for Electrical Installation Contractors (NICEIC).

GAS

The gas meter is also under the stairs.

As a normal safety precaution we would recommend that the gas service, together with any fitted gas appliances included in the sale, be inspected and tested for safety by a qualified gas engineer before the property changes hands.

PLUMBING and SANITARY FITTINGS

The property is connected to the mains.

The plumbing to the property is of copper and plastic. There is some reliance on plastic pipes within the plumbing system. Whilst these are quite durable, they may be more prone to impact damage than conventional copper pipes.

Without exposing the rising main running beneath ground and floor structures, we cannot confirm the material used here. For health reasons, lead pipes are no longer recommended. Lead pipes can develop leaks, especially if run in sub soils subject to movement, and nowadays polythene pipes are used below ground for this purpose. If you are concerned about the fact that a lead pipe is used, replacement with a new polythene main would be the best solution.

The water pressure to the taps at each level was found to be adequate and there were no obvious signs of any leakages to the underside of taps or waste pipes.

It is preferable for there to be an external overflow pipe as a failed float valve can be spotted quickly, and furthermore any surplus water is drained to a harmless exterior point. The fittings appear to be working, although detailed tests have not been carried out. We are unable to confirm that the plumbing installation is completely free of leakages, bearing in mind the limitation of the inspection and the fact that much of the pipework is in concealed locations.

We emphasise that we have not inspected any of the hidden pipework, either under floors or boxed in, so are unable to comment upon this.

HOT WATER and CENTRAL HEATING

A replacement boiler was installed within the utility room.

We stress to you that where copper pipes are buried in solid concrete floors these should be afforded some protection by way of a bitumen wrap material or equivalent. It is also essential that lagging be properly provided to permit thermal expansion and contraction. Even well made joints can fail if the pipework is screeded in solidly and unable to respond to thermal movements. Without the benefit of exposing these concrete floor structures, we cannot confirm that any of the above provisions have been allowed for and we would therefore recommend that the central heating system be placed on test. The ball valve to the separate header tank should be temporarily tied up to prevent any further water entering the system whilst the pipework is placed on test under pressure. Any significant drop in water level in the header tank will confirm leakages. Such leakages are likely to be undetected until consequential damage has been incurred, with resulting costly and disruptive repairs.

Following the amendment to the Building Regulations in 1985, scope was provided for a new mode of hot water supply to be introduced in this country. The new Water By-laws also permitted alterations in terms of plumbing. These two factors have made it possible to provide a domestic hot water system directly connected to the water mains and to be unventilated. To install such a system, however, still requires consent from two separate Statutory Authorities.

The first consent is from the Water Authority under the Water By-laws and the other is Building Regulation approval.

The advantages of a system directly fed from the mains and unventilated is generally greater efficiency, improved overall performance and the virtual elimination of frost problems, ie cold water storage tanks and associated pipework freezing over.

Important design considerations are, however, necessary for unvented hot water systems. Systems of this type are totally enclosed and have to be released from any undue pressure by the provision of an expansion vessel working in conjunction with a series of pressure reducing and pressure relieving valves. Whilst the supply can now be taken directly off the main supply, the need to guard against any back syphonage continues and it is essential that a specially designed check valve is installed, which operates in association with the pressure relieving valves. The matter of safety depends chiefly on the quality and the reliability of the mechanical components and controls. The possibility of individual failure of any of the above mentioned fittings is

more likely to be the result of wrong adjustment, the effects of scale, sludge, corrosion or blockage through gritty deposits. To ensure that safety standards are maintained at all times and the possibility of explosion is reduced to the lowest possible factor, the Authorities do insist that a three-line level of protection is provided and is designed to become activated in a pre-determined sequence.

Any danger of the temperature of the water rising above boiling point is to be overcome by the installation of thermostat, a temperature operated cut-out acting on the boiler or immersion heater, and a temperature controlled relief valve, which ensures that the water can only reach boiling point in the unlikely event of all three devices failing at the same time.

Due to the specialist nature of such a system, we would recommend that a heating engineer be commissioned to inspect the system to ensure that it complies with the above-mentioned standards. Such an inspection will need to be undertaken by a British Board of Agreement (BBA) Approved Installer. Obligatory safeguards also cover the need for any replacement or removal of components undertaken by a BBA Approved Installer only and it is now an offence to supply or install unvented systems without the stipulated registration, certification and approvals. Copies of such documents should, therefore, be obtained also.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Although this section provides a summary of our findings, it is important that the report is read as a whole.

LEGAL MATTERS

Your legal advisor's attention is drawn to the following:

- Your legal advisor should check whether there are any rights of way that exist over the property boundaries and if so, what the terms of ownership and repair and responsibilities are in this regard.

- Your legal advisor should confirm as to what rights of way/repair and responsibilities are afforded over the common parts of the property.

- Your legal advisor should confirm which of the subject boundaries are your responsibility, in respect to future maintenance and also where boundaries have not been properly demarcated. Also whether there are/have been any boundary disputes or similar.

- Your legal advisor should ascertain as to whether the below ground drainage is classified as a separate or combined system. It may be that the below ground drainage system is shared and, as such, there may be joint financial responsibilities.

- Your legal advisor should ascertain as to whether there has been any structural movement or claims related to the property.

- Your legal advisor should ascertain as to whether Building Control/Planning permission or other statutory consents, Party Wall approval, where applicable, were obtained for any alterations or additions to the property.

- Your legal advisor should enquire on your behalf as to the history of the property with regard to flooding.

- Your solicitor will check that the town planning and Building Regulations history of the property is in order. Appropriate local authority and other enquiries will reveal whether there are any planning proposals, etc. likely to adversely affect the property.

- It is important to check that all alterations to the property have the benefit of all necessary local authority consents, and were supervised by the Building Inspector under the Building Regulations.

- You should confirm that all the alterations were undertaken in accordance with a scheme drawn up and supervised by a qualified architect/structural engineer.

- All additional investigation and enquiries referred to in this report should be undertaken prior to exchange of contracts. Such investigation should include obtaining quotations for the various building works referred to in this report. Such enquiries should also include checking whether there has been a history of underpinning at the property or whether there has been any claim under a buildings insurance policy in respect of structural movement. The enquiries should also include asking about the history of any alterations carried out to the property over the years.

- Any guarantees in respect of previous building works should be checked.

URGENT REPAIRS

A number of repair items have been raised which will require attention either at the present time or in the future and you will no doubt bear the latter in mind. You will also no doubt wish to make alterations to both the external and internal decorative surfaces to suit your own particular tastes, although in addition to this, we draw your attention to the relatively urgent matters below:

1. Repair leaking gutter and water test rain water goods to ensure they are fit for purpose and free from defects.

2. Lift and re-bed hip tiles above front bay and undertake local crack repairs to the pebble-dashing, ideally reconfiguring the lead dressing / flashing and reinstalling to maintain the buildings long term weather proofing qualities.

3. Trace and remedy cause of dampness noted below the window to bedroom three and make good damage so caused.

In view of our findings therefore, as to the property as a whole, we strongly recommend that estimates for the above mentioned urgent repairs are obtained before the exchange of Contracts. Only when you have all this information will you be fully equipped to make a reasoned and informed judgement on whether or not to

proceed with the purchase. We must advise you, however, that if you should decide to exchange contracts without obtaining this information, you would have to accept the risk that adverse factors might come to light in the future.

FURTHER INVESTIGATION

The following should also be dealt with before exchange of contracts:

- Obtain gas safety certification.
- Obtain electrical safety certification.
- Undertake a CCTV survey of the drainage system to ensure that is it fit for purpose.
- Consider further the possible presence of asbestos within the property and arrange for specialist to test prior to disturbing the same.

MAINTENANCE

We have highlighted throughout this report the need for areas of maintenance or items that will require your attention. Estimates for these should be obtained **prior to exchange of contracts** so that you are sure that the Property falls within your budget.

STRUCTURAL MOVEMENT

Minor bedding down of the internal partitions has caused some of the door openings to be out of square and some minor initial settlement has caused some hairline cracking to some of the plaster walls/ceilings surfaces but this is not related to any progressive or ongoing problem.

The structural condition of the property is otherwise satisfactory. We found no evidence of any significant cracking or current settlement/subsidence or structural movement and no indication to suggest that the foundations are defective or inadequate.

It is important that you appreciate that a building survey is not a substitute for an insurance policy. We can only comment upon the degree of structural movement to date and the possible risks involved. All property owners are advised to ensure that their property is insured from the moment of exchange of Contracts for the usual perils in this case, subsidence, land slip and ground heave.

OVERALL OPINION

Within the context of a building survey we found this property to be a reasonable proposition for purchase, provided that you are prepared to accept the costs and inconvenience of dealing with the various repair works reported. These defects are not inconsistent with a property of this age and type.

We trust that our report provides the information and advice you require. If we can be of any further assistance, please let us know. We mention that our report has been prepared for you as our client in connection with the respected purchase of the property and we cannot accept responsibility for it to any third party who may become acquainted with its contents, without our prior knowledge and consent in writing. An electronic pdf copy of the report can be sent to your legal advisors if requested.

Yours sincerely

Peter Modrekelidze MRICS
Mayfords (Surveyors) Limited

8.0 GLOSSARY

Brief explanation of some of the technical words and terms that may be found in our report

Air brick Perforated brick or grating set into wall to provide ventilation. Most frequently used at the base of walls to ventilate timber ground floors. Insufficient ventilation can result in dry rot to floor timbers.

Barge Board Wide board fitted below tiles of overhanging verge to gable.

Binder Horizontal timber placed at right-angles to and above ceiling joists to stiffen ceiling and provide additional support.

Bressummer Beam supporting walls and floor joists over openings in main walls by bay windows.

Cavity Wall External wall, comprising inner and outer 'skin', brick or block with space between. Properly constructed it is more resistant to damp penetration than solid wall and improves thermal insulation.

Cesspool Watertight chamber in which sewage effluent is collected. Has to be emptied at intervals - a service usually provided by Local Authority for which a charge is made.

Collar (in roof) Timber that ties across between rafters on either side of a roof at some point above the feet of the rafters.

Collar (in drain) Wider end of pipe into which another pipe fits.

Damp Proof Course (dpc) Layer of some impervious material incorporated in the structure to prevent passage of dampness through porous materials. Older buildings often constructed without dpc. Chemical injected dpc often recommended as the cheapest method of damp proofing. This method not as effective as physical barrier and depends partly on replastering walls.

Damp Proof Membrane Similar to dpc but in solid ground floors to prevent damp rising up through floor. Should be connected to dpc in surrounding walls to be fully effective.

Dormer Window Window set into roof slope.

Dry Rot/Wet Rot Fungus growth which attacks timber. Conditions conducive to growth of dry rot are damp, coupled with stagnant air, e.g. if sub-floor ventilation is lacking. Wet rot thrives in similar conditions also in external joinery unless maintenance is meticulous. Does not worsen after damp source removed,

unlike dry rot which will continue to spread and affect new timber or adjoining areas if not properly treated.

Eaves Projecting edges of a roof.

Expansion Tank Small storage tank linked with the central heating system to top up water in that system independent of main cold water storage tank.

Fascia Vertical board at eaves level to which guttering often attached.

Fillet Method of weatherproofing joint between roof covering and brickwork, e.g. around the base of chimney. Most frequently in cement but sometimes of tiles set in cement. Less satisfactory than flashing (see below) because of inflexibility and liability to crack.

Flashing Method of weatherproofing joint between roof covering and brickwork using metal sheeting.

Floors Suspended timber - a system of joists covered with floorboards or chipboard at first floor level, suspended between walls and resting on them, at ground floor level, most often supported by small 'sleeper' walls on oversite concrete. Cavity beneath floorboarding should be ventilated by air bricks set into external walls to avoid conditions conducive to growth of dry rot. Solid floor usually formed of hardcore, surmounted by 4" to 6" concrete, then a damp proof membrane with final surfacing of cement screed and floor finish.

Foundations Firm base constructed beneath ground to spread loading from a building on to subsoil. Modern buildings normally have strong concrete foundations. Older buildings often have weaker, shallow foundations, more susceptible to failure and subsidence. Some older buildings are sometimes constructed direct onto compacted soil.

Gable Triangular part of an exterior wall beneath two roof slopes.

Gutters Normally formed in cast iron in older properties but in PVC in modern houses. 1) Half round semi-circular section fixed to fascia with brackets. 2) Ogee - a different pattern with vertical rear side screwed direct to fascia -disadvantage is that it restricts decoration of fascia and rear face of gutter; rusting and failure of gutter can result, and in extreme cases, rot in fascia and feet of rafters.

Hanger Vertical timber fixed between rafters and binder to provide additional support to ceilings.

Hip External angle formed by roof when end slopes backwards instead of ending in a gable. Usually protected by tiles even on slate roof.

Land Drain Method of disposal of water beneath ground. Usually comprises a drain laid down with open joints and surrounded by shingle or similar material through which water can disperse into surrounding soil. Drains will become blocked with silt in time.

Lath and Plaster Traditional way of forming plaster surface on ceilings or timber partitions. Comprising a number of horizontal battens or laths which form a key for the plaster. Now largely obsolete and replaced by plasterboard.

Lean-to Roof Roof constructed with single pitch leaning from eaves against another external wall.

Lintel Beam normally of concrete or metal - sometimes timber - spanning opening in a wall to support the wall above.

Purlin Horizontal timber in roof space which provides intermediate support to rafters.

Rafters Inclined timber immediately beneath the roof covering to which the tiling battens or boarding for sloping roofs are fixed.

Reveal Vertical side face of an opening for a window or doorway between the frame and outer face of wall.

Ridge The horizontal line at the apex of a roof. Usually has tile covering.

Roof Truss Triangular framework of structural members supporting a roof, carrying horizontal members (purlins) which in turn support common rafters. (See also 'Trussed Rafter').

R.S.J. Rolled steel joist - steel supporting beam.

Septic Tank Sewage disposal system normally comprising two or three linked chambers within which self-purifying (bacteria) process takes place, beyond which is al outfall to land drains or a soakaway (see below) for the purified liquid effluent. Occasional emptying may be need, but dependent upon soil conditions and method of use, septic tank can remain undisturbed for a number of years. New land drains or soakaways may also be required but on average probably at intervals of not less than ten years.

Soakaways Method of water disposal, usually for surface water, i.e. hole dug in the ground and then filled with brick, rubble or similar material and covered over. Disperses water from drains leading into it provided surrounding soil conditions are suitable.

Soffit	The underside of overhanging eaves or an archway. Sometimes used to describe sloping sections inside a house beneath a roof or staircase.
Spall	Process whereby the face of damp bricks or other building materials is blown off by frost action, leaving a soft porous surface. Affected bricks should best be cut out and renewed, although resurfacing with a coloured cement render is often acceptable.
Strut	Load bearing timbers normally supporting purlins (see above) and fixed at an angle down to a wall or some other load bearing point.
Stud Partitions	Wall formed of pieces of timber (stud) covered with plasterboard or lath and plaster in older property. Unless specially constructed, unlikely to give sound insulation or strength of brick or block partitions.
Throat	Groove cut in the underside of external sills to throw rainwater away from walls. Where throats do not exist, rainwater can run back beneath the sill, soaking into the wall and causing dampness inside the building.
Tie Bar	Metal bar inserted across building to tie outer walls together, i.e. to arrest movement in structure and improve stability.
Trussed Rafter	Derivative of roof truss (see above). Factory made timber framework used instead of common rafters, joined together by metal connectors or adhesive.
Underpinning	Construction of new foundations beneath existing walls to arrest uneven subsidence due to ground movement or foundation failure.
Valley	Internal angle formed by the outside surfaces of two adjoining roof slopes. Can be tiled or formed in metal or, less durably, in felt. May be called 'valley gutter' particularly when horizontal, i.e. between two parallel adjacent sloping roofs.
Verge	Edge of a roof which runs from eaves to ridge at a gable (usually cement pointed).
Wall Plate	Horizontal timber at top of wall on which floor or roof timbers, rafters or joists rest.
Wall Tie	Metal connector used to provide structural link between inner and outer skins of cavity wall.
Woodborer Infestation	Insect that attacks timber. Eggs are laid by the insect. Resulting grub eats away within the timber before emerging as adult insects through distinctive and characteristic flight

holes in spring/early summer. Serious infestation can ultimately result in breakdown of timber but is relatively slow process. Most usual attack is by common furniture beetle. Other species are more voracious such as Deathwatch Beetle and House Longhorn Beetle. Chemical treatment will eradicate woodborers. Specialist companies offer a service with long term guarantees against re-infestation.